

Notice of Allowability**Application No.**

10/695,574

Examiner

Susan E. Fernandez

Applicant(s)

BARRITAU ET AL.

Art Unit

1651

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to telephonic interview on March 28 2011.
2. ☒ The allowed claim(s) is/are 70.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date ____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 20110324.
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other ____.

/Allison M. Ford/
Primary Examiner, Art Unit 1651

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Patricia D. Granados on March 28 2011.

The application has been amended as follows:

CLAIMS:

Claim 70 is **amended** as follows:

70. A process for treating fibroses comprising administering a therapeutically effective amount of a pharmaceutical composition comprising at least one biocompatible polymer having the general formula (I):



wherein

A is a glucose monomer;

X is $-\text{CH}_2-\text{COOH}$ or $[-\text{CH}_2-\text{COO}-\text{Na}^+]-\underline{\text{CH}_2-\text{COO}-\text{Na}^+}$;

Y is SO_3^- ;

Z is selected from the group consisting of: phenylalanine, tyrosine, phenylalanine methylester and tyrosine methylester;

a represents the number of monomers A such that the mass of said [[polymers]] at least one biocompatible polymer of formula (I) is greater than approximately 5,000 Da;

x represents the substitution rate of the monomers A by the group X, and x is 28.9% when Z is phenylalanine or phenylalanine methylester and 19.8% when Z is tyrosine or tyrosine methylester[[.]]; and

y represents the substitution rate of the monomers A by the group Y, and y is 56.2% when Z is phenylalanine or phenylalanine methylester and 65.9% when Z is tyrosine or tyrosine methylester; and

z represents the substitution rate of the monomers A by the group Z and z is 17.9% when Z is phenylalanine or phenylalanine methylester and 28.9% when Z is tyrosine or tyrosine methylester;

wherein when Z is phenylalanine or phenylalanine methylester, A is a glucose monomer on which X is grafted by the intermediary of the hydroxyl function in position 2, Y is bonded to the nitrogen of Z or grafted by the intermediary of the hydroxyl function in positions 3 or 4 of A, and Z is bonded to X, and

wherein when Z is tyrosine or tyrosine methylester, A is a glucose monomer on which X is grafted by the intermediary of the hydroxyl function in position 2, Y is bonded to the nitrogen and hydroxyl group of Z or grafted by the intermediary of the hydroxyl function in positions 3 or 4 of A, and Z is bonded to X,

and wherein in an in vitro assay of pig aorta smooth muscle cells cultured on a medium with fetal calf serum, L-glutamine, and penicillin-streptomycin, said at least one biocompatible polymer

decreases the rate of Type I and Type III collagen synthesis and increases the secretion of Type V collagen by the pig aorta smooth muscle cells.

SPECIFICATION:

The paragraph at lines 16-23 of page 58 is to be **amended** as follows:

--Fig. 26 shows the results obtained. The RGTA exert an inhibitory effect on the proliferation of the smooth muscle cells which is comparable to that of heparin which was used as control reference molecule. This effect can be seen from the values in the two first columns. However, and in contrast to heparin, these polymers reestablish the collagen secretion phenotype. In summary, the overall synthesis rate of collagens is significantly diminished in the presence of RGTA 1005, [[1012]]1112 and [[1013]]1113. At the qualitative level, these same polymers, again in contrast to heparin, diminish the rate of synthesis of type I and type III collagens while increasing the secretion of type V collagen.--

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan E. Fernandez whose telephone number is (571)272-3444. The examiner can normally be reached on Mon-Fri 9:30 am - 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Wityshyn can be reached on (571) 272-0926. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Allison M. Ford/
Primary Examiner, Art Unit 1651

Susan E Fernandez
Examiner
Art Unit 1651

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